

Application of the Theory of Thermodynamic  
Similarity for Determining the Physical  
Properties of Liquid Metals

S/170/60/003/006/006/011  
B013/B067

dimensionless Lorentz function for fused metals belonging to a group of thermodynamically similar substances, is deduced. Formulas (17), (19), (20), and (22) are given for computing the physical properties of liquid metals of the same thermodynamic group. The calculated viscosities of some metals were compared with experimental data (Fig. 1 and Table 1), and the computation of the thermal conductivity of lead from the melting points of lead and tin is described. The calculated value is in good agreement with the experimental one. Bachinskiy and A. N. Solov'yev are mentioned. There are 1 figure, 1 table, and 9 references: 8 Soviet and 1 German.

1/2

Card 2/2

BUTENKO, G.F.; RADCHENKO, M.I.

Calculation of thermal conductivity of fused metals. Atom. energ. 6  
no.2:205-207 F '59. (MIRA 12:3)  
(Liquid metals) (Heat--Conduction)

FADCHENKO, V. I.

"Problem of the Age of the Coal-bearing Strata in the Karaganda Basin"  
Izv. AN Kazakh SSR, 124, Ser. Geol., 1953, No 17, 171-175 (Kazakh resume)

The authors clarifies the coordination in time of individual species of  
calamites to the various geological formations of the Karaganda basin.  
(RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

RADCHENKO, M.I.

Age of the Karaganda series flora in Karaganda Basin. Trudy Lab.geol.  
ugl. no.2:182-190 '54. (MLRA 8:7)  
(Karaganda Basin--Geology, Stratigraphic)  
(Karaganda Basin--Paleobotany)

RADCHENKO, M.I.

Flora in Carboniferous sediments of eastern Kazakhstan and the  
Karaganda Basin. Izv. AN Kazakh. SSR. Ser. geol. no.2:28-36 '58.

(MIRA 12:5)

(Kazakhstan--Paleobotany) (Karaganda Basin--Paleobotany)

RADCHENKO, M.I.

Age of the Del'begetey series in eastern Kazakhstan. Izv. AN  
Kazakh. SSR. Ser. geol. no. 4:94-98 '58. (MIRA 12:4)  
(Kazakhstan--Geology, Stratigraphic)

RADCHENKO, M.I.

Paleophytologic basis of the carboniferous stratigraphy of  
Kazakhstan. Izv.AN Kazakh.SSR.Ser.geol. no.4:3-7 '59.  
(Kazakhstan—Geology, Stratigraphic) (MIRA 15:4)

RADCHENKO, M. I.

Genus Cardiopteris Schimper from upper Carboniferous sediments in  
eastern Kazakhstan. Trudy Inst. geol. nauk AN Kazakh. SSR no.3:  
63-67 '60. (MIRA 14:1)

(Kazakhstan--Paleobotany)



PROCESSES AND PROPERTIES INDEX

Tin-Free Bronzes. K. I. Vashchenko and M. M. Radchenko (*Trudy Tsentral. Lab. Zavoda "Bol'sherik,"* 1940, 65-102; *Khim. Refrat. Zhur.*, 1941, 4, (4), 92; *C. Abs.*, 1943, 87, 4906).--[In Russian.] Standards are given for tin-free bronzes, including aluminium bronzes and silicon-manganese bronzes of the Everdur type. The acid resistance of the bronzes is little affected by the presence of 8-11% aluminium. Addition of up to 4%, iron also has little effect on the chemical stability of the bronzes. The anti-friction properties of these bronzes are somewhat poorer than those of the tin bronzes, but they are satisfactory in most cases. Bronzes of this kind can be used for temperatures of up to 300-350° C. The conditions of melting and of the production of sound castings are described.

SOV/47-59-3-33/53

22(1)

AUTHORS: Gol'dshteyn L.A. and Radchenko M.M., (Baku)

TITLE: Experience Working With Laboratory Radio Equipment

PERIODICAL: Fizika v shkole, 1959, Nr 3, pp 86-87 (USSR)

ABSTRACT: The authors describe the structural and methodological shortcomings of the laboratory radio equipment produced by the plants of Glavuchtekhprom and indicate means to overcome these shortcomings in practical training in secondary schools. The constructional shortcomings are: 1) feeding of the radio set by batteries of galvanic elements; 2) the filament resistor is very easily disintegrated. As shortcomings the authors list: 1) the use of pentodes type 2ZH2M or 2K2M, whereas the students study only triodes; 2) the fact that the feeding of a radio system by battery diverts teaching from life, as about 90% of the receivers produced by Soviet industry are fed by alternating current; 3) the sym-

Card 1/2

SCV/47-59-3-33/53

Experience Working With Laboratory Radio Equipment

1        bols intended to guide the assembly work are formed according to the visual appearance of the parts and make assembly too easy. The last shortcoming could be easily eliminated by taking the eight assembly diagrams from the description of the equipment. The other shortcomings were overcome by: 1) replacing battery feeding by alternating current (full-wave kenotron rectifier with filter and half-wave selenium rectifier with filter); 2) using six-volt tubes type 6K7 or 6Zh7. Moreover, in order to facilitate the assembly work by students, the authors recommend the use of triodes type 6S5 instead of pentodes type 2K2M or 2Zh2M.

Card 2/2

RADCHENKO, M.Ye. [Radchenko, M.IU.]; TSVETKOV, V.P. [TSvietkov, V.P.]

Atomic scattering and electron density of carbonyl iron. Ukr.  
fiz. zhur. 8 no.12:1364-1371 D '63. (MIRA 17:4)

1. Kommunariskiy gorno-metallurgicheskiy institut.

L 14815-65 EWT(m)/EWP(t)/EWP(b) ASD(a)-5/ASD(m)-3/AS(mp)-2/ASD(p)-3/ESD(t)

JD  
ACCESSION NR: AP4044143

S/0126/64/018/002/0182/0186

AUTHOR: Tsvetkov, V. P.; Kravtsova, N. F.; Radchenko, M. Ye. B

TITLE: Determination of the number of free electrons in metals by x-ray scattering, and the electronic heat capacity

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 2, 1964, 182-186

TOPIC TAGS: x ray scattering, electronic heat capacity, free electron number, electron concentration, metal

ABSTRACT: The experimental data on atomic scattering of x-rays were used for the determination of the number of electrons  $n$  which are outside the sphere equal to the atomic volume. This number was found to be equal to the number of free electrons contributing to the heat capacity. A comparison of the experimental values of the electronic heat capacity with those computed from Sommerfeld's formula, in which the values of  $n$  were used for the number of the free electrons, show a good agreement. Orig. art. has: 5 equations, 1 table

Card 1/2

L 14615-65

ACCESSION NR: AP4044143

ASSOCIATION: KommunarSKIY gornometallurgicheskiy institut (Kommunarsk  
Mining-Metallurgical Institute) Metal Physics 18 2

SUBMITTED: 23Sep63

ENCL: 00

SUB CODE: NP, MM

NO REF SOV: 004

OTHER: 013

Card 2/2

FALCHENKO, M.Ye.

Determination of the temperature of ordering in  $\text{Fe}_3\text{Si}$  alloys.  
Zhur. neorg. khim. 10 no.2:561-562 F '65. (MIPA 18:11)

1. Kommunarskiy gornometallurgicheskiy institut. Submitted  
April 14, 1964.

RADCHENKO, M.Ye. [Radchenko, M.IU.]; TSVETKOV, V.P. [TSvietkov, V.P.]

Nature of the chemical bonds in alloys. Ukr. fiz. zhur. 10 no.1:  
99-103 Ja '65. (MIRA 18:4)

1. KommunarSKIY gorno-metallurgicheskiy institut.



L 60157-65 EWT(1)/EWA(1)/EWA(b)-2 RO

ACCESSION NR: AP5018227

UR/0348/65/000/007/0009/0010  
632,982.2

AUTHOR: Radchenko, N. (Senior agronomist for plant protection)

TITLE: Use of aerosols

SOURCE: Zashchita rasteniy ot vreditel'ey i bolezney, no. 7, 1965, 9-10

TOPIC TAGS: aerosol spraying, agriculture, Diesel fuel, DDT aerosol

ABSTRACT: During the past three years, the farms of the Chimishliyskiy rayon have used the aerosol method to control harmful insects. In 1963, they used a 10% solution of technical DDT in Diesel fuel. In 1964, by means of two AG-UD-2 aerosol generators, they sprayed more than 1,500 hectares of perennial crops with a mixture of 8% DDT and 4% hexachlorocyclohexane (BHC) in Diesel fuel. The author complains that the Soviet-produced technical DDT does not dissolve in cold Diesel fuel so that one must use heated Diesel fuel. The Romanian-produced technical DDT, which will dissolve in cold Diesel fuel, is therefore much better. Orig. art. has: 1 table.

Card 1/2

L 60157-65

ACCESSION NR: AP5018227

ASSOCIATION: Moldavskaya SSR (Moldavian SSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: GO

NO REF SOV: 000

OTHER: 000

Card

*dm*  
2/2

*Ca*

ISOTOPES AND PROPERTIES INDEX

Isotopic composition of arctic waters, ice and glaciers.  
A. I. Bredikhin, N. P. Radchenko and N. L. Smekhnova.  
*J. Phys. Chem.* (U. S. S. R.) 13, 1694-1701(1959).  
Various samples obtained from widely different parts of  
the Arctic Ocean were analyzed. From the differences in  
 $\delta d$  between these samples and normal (river) water, the  
samples can be divided into 3 different groups related to 3  
different ocean drifts. The polar glaciers and the East  
Siberian Sea to Alaska yield  $\delta d = -1.7$ ,  $\delta d = 4.3$ ; the  
Novaya Zemlya, Franz Joseph and Chukhot Sea waters,  
 $+2.4$  and  $0.0$ ; and the Kara Sea, Ob River and Greenland  
waters  $+0.3$  and  $+2.0$ , where  $\delta d$  is the excess  $d$  in p. p.  
m. due to H<sup>2</sup> and  $\delta d$ , that due to O<sup>18</sup>. F. H. Rathmann

2

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

E-277777-1

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSING AND PROPERTIES INDEX

2

CA

Isotopic composition of Arctic seas and ice. A. I. Brodskii and N. P. Rodchenko. *Acta Physicochim. U. R. S. S. 13, 145-58 (1957) (in German); cf. C. A. 33, 353P.*—On the basis of analyses of 18 samples collected between 73-80° N. Lat. and 10-187° W. Long., B. and R. find that the samples fall into 3 groups with considerable deviations of the H<sup>2</sup> and O<sup>18</sup> contents from those found in river waters. The results show that the isotopic compn. of sea water cannot be explained simply by differences in the rates of evapn. of the isotopes.  
F. H. Rathmann

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

600

RADCHENKO 4N8P8

1. BRODSKIY, A.I.; RADCHENKO, N.P.; SMOLENSKAYA, B.L.

2. USSR (600)

"The Isotonic Composition of Arctic Waters and Ices," Zhur Fiz.Khim, 13, No. 10, 1931. Dneprometrovsk, Institute of Physical Chemistry, Academy of Sciences Ukrainian SSR imeni L.V. Pisarzhevskiy, Department of the Chemistry of Isotopes. Received 15 June 1939.

9. [REDACTED] Report U-1615, 3 Jan. 1952.

RADCHENKO, N. I.

Mbr., Inst. Physical Chemistry im. L. V. Pisarzhevskiy, Ukr. Acad. Sci., -1940-.  
Chemistry. "The Isotopic Structure of the Arctic Sea and Ice," Acta Phys., 13, No. 1,  
1940.

SKARCHENKO, V.K.; RUSOV, M.T.; STREL'TSOV, O.A.; RADCHENKO, N.P.;  
SNIGUROVSKAYA, Yu.A.

Effect of the reduction conditions of industrial catalysts for  
ammonia synthesis on their specific activity. Report No.1:  
Kinetics of the catalyst reduction. Ukr. khim. zhur. 24 no.4:  
443-448 '58. (MIRA 11:10)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR.  
(Catalysts) (Reduction, Chemical)

SKARCHENKO, V.K.; RUSOV, M.T.; STREL'TSOV, O.A.; RADCHENKO, N.P.;  
SNIGUROVSKAYA, Yu.A.

Effect of the reduction conditions on specific activity of industrial catalysts for ammonia synthesis. Part 3: Effect of the grain size and temperature conditions of reduction on specific activity of the catalyst. Ukr.khim.zhur. 24 no.5:602-607 ' 58. (MIRA 12:1)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN USSR.  
(Catalysts) (Activity coefficients) (Ammonia)



[illegible]

1. Anticatalytic Effect of Nickel on I.V. Selenic Acid in H<sub>2</sub>O<sub>2</sub>  
(Catalysts)

RADCHENKO, N.P.

Elementary zinc content of a regenerated zinc-chromium catalyst of the synthesis of isobutyl alcohol from carbon monoxide and hydrogen. (MIRA 16:5)  
Ukr.khim.zhur. 29 no.1:55-56 '63.

1. Institut fizicheskoy khimii im. L.V.Pisarzhhevskogo AN UkrSSR.  
(Zinc--Analysis) (Catalysts) (Isobutyl alcohol)

ZEYLIK, B.S.; RADCHENKO, N.S.

Find of geyserites and travertines in Aktogay District (Central  
Kazakhstan). Zap. Vses. min. ob-va 93 no.4:484-486 '64  
(MIRA 18:2)

KORNIK, M.F.; RADCHENKO, N.S.

Granite-and-syenite-diorite formation of the Olyutorskiy trough  
(Koryak Highland). Dokl. AN SSSR 263 no.5:1224-1229 Ag '85.  
(MIRA 1818)  
1. Nauchno-issledovatel'skiy institut geologii Arktiki. Submitted  
April 20, 1985.

Mr. Henry M. ...

As the center of attention of the political agency. ...  
... 8:43-46 ... 164.

22

oil.

The bitumen of the Velikhorakii deposit, N. A. Orlov and G. A. Rudchenko, *Khim. Preloz. Leningr. V. 1*, 1931, 1932. Analyses of the bitumen (probably an asphaltum) and its products are given. The ash is radio active, some of A being assumed to be present.

A. A. Bochtling

ASH SLA METALLURGICAL LITERATURE CLASSIFICATION

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| PRELIMINARY AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>CO</p> <p>Humic substances. II. Oxidation of sugar carbon. N. A. ORLOV AND O. A. RAUCHENKO. <i>J. Applied Chem.</i> (U. S. S. R.) 5, 207-10 (1952); cf. C. A. 26, 3485. Oxidation of sugar C with <math>\text{KMnO}_4</math> yields <math>\text{CO}_2</math> 32%, volatile fatty acids 6.9% (including mellitic acid 1.28, oxalic 0.1, and <math>\text{AcOH}</math>). The presence of <math>\text{C}_6\text{H}(\text{CO}_2\text{H})_3</math> and <math>\text{C}_{10}\text{H}_2(\text{CO}_2\text{H})_4</math> was ascertained. The structure of sugar C is believed to be similar to that of coal. V. KATCHIRVSKY</p> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>AND SEE METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>1134 834179</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3RD AND 4TH ORDERS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| PROCESSES AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ca</p> <p>Attempt at a chemical investigation of the organic mass present in kukkersite. N. A. Orlov and O. A. Radchenko. <i>Khim. Tverdogo Topliva</i> 5, 506 (1934). The original kukkersite obtained near Gdov, contg. 50% ash, was coned. and the carbonates were removed with 3% HCl. It then contained H<sub>2</sub>O 1.67, ash 16.81, S 1.60 and CO<sub>2</sub> 0.27% (incomplete decompn. of carbonates); ultimate analysis gave C 77.48, H 9.38, N 0.25, O + S (by difference) 12.89%. A C<sub>11</sub>H<sub>8</sub>-EtOH extn. yielded 0.6% of an almost hard bitumen with C 63.28, H 8.77%, acid no. 39 and sapon. no. 134. It appears to be close to acids of the type C<sub>11</sub>H<sub>8</sub> (O<sub>4</sub>) and C<sub>11</sub>H<sub>8</sub> (O<sub>5</sub>). Humic acids are absent and an attempt to decompose the shale with alk. alkali under pressure failed. An extn. with an AmOH soln. of alkali (5%) carried out under pressure, as well as a H<sub>2</sub>O extn. of the remaining shale, yielded an ext. composed of C 70.57 and H 11.18%, I no. 186 and acid no. 14. It probably contains acids or esters of the type C<sub>11</sub>H<sub>8</sub> (O<sub>4</sub>). The residue of the ext. contained valeric, acetic and formic acids. The presence of unsat. aliphatic acids is also probable. A. A. Bechtling.</p> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <p>22</p>          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



22

CA

Investigation of humic substances. V. Weathering and humification of some natural bitumens. N. A. Orlov and O. A. Radchenko. *J. Applied Chem.* (U.S.S.R.) 7, 113 21(1934); cf. *C. A.* 26, 3485, 5078; 27, 1887, 5748. Coal, asphaltite and artificial asphalt yielded on weathering at 135-200° products which had a structure of a condensed ring-system. The ability of these substances to become methylated shows the presence of hydroxyl and carboxyl groups in the same ams. as are found in natural humic acids. The carbohydrates formed under the weathering conditions may be considered as being intermediate products. It is possible that in the formation of the carbohydrates, an active part was taken by the low-mol. fragments of the oxidation products, such as formaldehyde. The carbohydrates may participate in the building up of the aromatic-furoid bases.

A. A. Boehlingk

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

130MI 51V 031VA

130MI 80M19V

130MI 80M19V

CA 22

Humic substances. VI. Weathering of kukkersite.  
N. A. Orlov and O. A. Radchenko. *J. Applied Chem.*  
(U. S. S. R.) 7, 1470 D(1934); cf. *C. I. 28*, 7512.  
The weathering of kukkersite by oxidation in air at  
elevated temp. yielded a substance having all the prop-  
erties of humic acids. Simultaneously, the formation of  
a caramel-like substance, which could not be isolated, was  
observed. The expts. are described. Six references.  
A. A. Bochtlingk

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |
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| <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>PROCESS AND PROPERTIES INDEX</b> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  | <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>1ST AND 2ND ORDERS</b> </div> |  |  |  |  |  |  |  |  |  | <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>1ST AND 4TH ORDERS</b> </div> |  |  |  |  |  |  |  |  |  |
| <div style="position: relative;"> <div style="position: absolute; top: 10%; left: 10%; font-size: 2em; font-family: cursive;">CU</div> <div style="position: absolute; top: 10%; right: 10%; font-size: 2em; font-family: cursive;">10</div> <div style="position: absolute; top: 30%; left: 25%;"> <p><b>Conversion of furfural into hydrocarbons.</b> N. A. Orlov and O. A. Radchenko. <i>J. Applied Chem.</i> (U. S. S. R.) 9, 240 (1936) (English 253) (1936); cf. O. Gorskaya and R. Khim. <i>Izvestiya Tsvetnoy</i> 6, 606 (1935). Furfural (I) (200 g.) was hydrogenated with 5 g. Mo sulfate in a revolving autoclave at an initial pressure of 150 atm. The product of incomplete hydrogenation obtained at 370° for 3-4 hrs. is a viscous, heavy liquid, contg. sylvan, b. 63-3.5°, tetrahydroisylvan, bps 77-8°, and some 2-pentanol. Hydrogenation at 330-50° for 1.5-2 hrs. resulted in a complete elimination of O in I and formation of various hydrocarbons, consisting mostly of C<sub>7</sub>H<sub>14</sub>, paraffins, naphthenes and probably some aromatic hydrocarbons. C. H.</p> </div> </div> |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |
| <b>ASACSLA METALLURGICAL LITERATURE CLASSIFICATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                              |  |  |  |  |  |  |  |  |  |
| <b>1ST ORDER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  | <b>2ND ORDER</b>                                                                                             |  |  |  |  |  |  |  |  |  | <b>3RD ORDER</b>                                                                                             |  |  |  |  |  |  |  |  |  |
| <b>1ST ORDER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  | <b>2ND ORDER</b>                                                                                             |  |  |  |  |  |  |  |  |  | <b>3RD ORDER</b>                                                                                             |  |  |  |  |  |  |  |  |  |

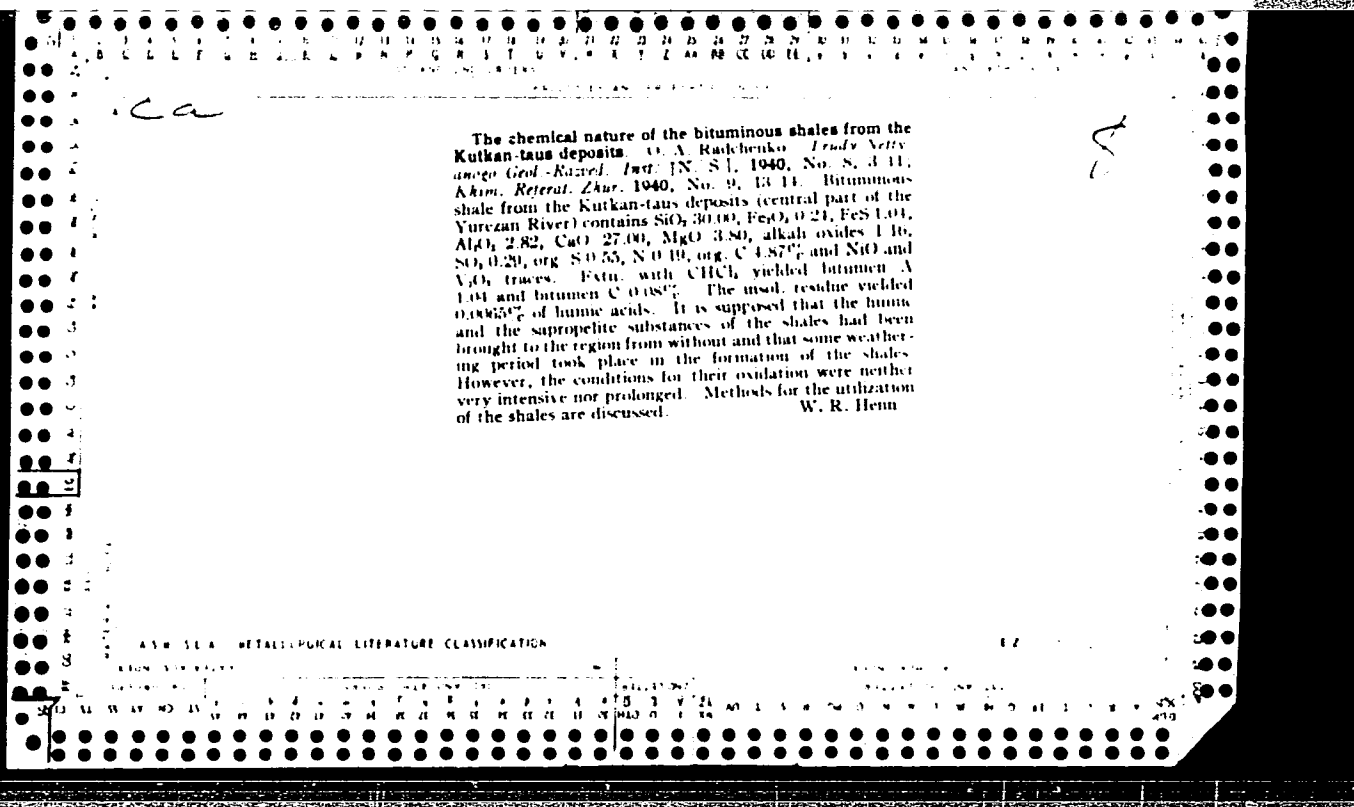
RADCHENKO, G. A.

Radchenko, G. A. "Chemical Study of Bitumens of the Artinsk Deposits in the Storitsinsk Oil-Bearing Region." In the book: Materialy k Poznaniyu Ishimskogo Neftorozhdeniya Nefti, Trudy Neftianogo Geologo-Razved. Institute, Leningrad-Moscow, Series A, No. 101, 1937, pp. 60-76.

Geochemical investigation of asphaltized substances in Western Turkmeniya. O. A. Radchenko, N. A. Chelov, and I. N. Mel'isanskaya. *Akhiu. Izvestiya* 8, 3: 25 (1977). Seventeen samples of asphaltized sand and sandy rocks were investigated for bitumen, hydrocarbons and "fucoidin," representing partially changed residue of the mother substance of petroleum of local origin. The preservation of the hydrocarbon and "fucoidin" like substances in the asphaltized samples points to the low temperature of formation of petroleum. That the bitumen obtained from the asphaltized samples during weathering under went an oxidation was disclosed by the increased O content, oxidation no., sapon. no. and usually by the decrease of the I no. During weathering the content of oil fraction in bitumens decreased and the asphaltene fraction increased. Weathering of the bituminous substances and of parent substances led to the formation of resinous substances. Analytical data are tabulated and the results are discussed. Eighty-five references. A. A. Podgorny.

AS 45.4 METALLURGICAL LITERATURE CLASSIFICATION

| PROCESSING AND PROPERTY INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1ST AND 2ND COLUMNS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  | 3RD AND 4TH COLUMNS |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>Ca</p> <p>The nature of petroleum from the Ishimbayev fields from data obtained by geochemical studies of bitumens. O. A. Radchenko. <i>Materialy Strany pri Neftenykh Yuzhnykh Prakh, Trudy Neftyanogo Geol.-Razved. Inst.</i> 1930, No. 115, 237-51; <i>Khim. Referat. Zhur.</i> 1940, No. 8, 21-3. Numerous analyses of bitumens contained in the mineral deposits of the Ishimbayev region were made to det. the origin of petroleum in these deposits. The bitumens are divided into the I and II bitumens. The composition of bitumen I is similar to that of petroleum from the Kusepkulov and Ishimbayev massifs. Further investigations indicate the presence in the rocks of an org. substance which is foreign to crude oil and syngenetic with the rocks. This indicates the secondary origin of petroleum. The same conclusion is reached by studying the humic acids of the Kusepkulov massif which were, evidently, formed from plant residues and from terrigenic material accumulated during the formation of the massif. Anal. of analyses of the bitumens investigated are given. The periods of migration and origin of petroleum which penetrated the Ishimbayev massifs are discussed. W. R. Hunt</p> |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASB-55A METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |



Migration of shale bitumens O. A. Radchenko  
*Izudy Neftyanogo Geol.-Khim. Inst.* (N. S. 1, 1940, No  
 8, 12-20, *Khim. Referat Zhur.* 1940, No. 9, 11. The  
 distribution of bituminous shale and limestones along the  
 central part of the Yurezan River indicates that asphalt  
 is the migration product of the shale bitumens. A genetic  
 connection was found between the bitumens of shale and  
 limestones despite absence of carbonies in the asphalt,  
 which were probably retained by the mother mineral. The  
 content of O was higher in all bitumen fractions than in  
 asphalt, except in the acid fraction and phenols. The  
 higher content of S in asphalt resulted from the action of  
 secondary processes. The presence of thiophenes in the  
 bitumen and asphalt and the absence of porphyrins are char-  
 acteristic. The reverse relation existing in the Ishimbay  
 petroleum indicates the absence of a genetic connection  
 between the petroleum and the shales investigated.

W. R. Henn



1. RADCHENKO, O. A., KARPOVA, I. P.
2. USSR (600)
4. Bitumen - Tatar A. S. S. R.
7. Chemical properties of certain bituminous matter from the Permian and Carboniferous deposits of southern Tatar A. S. S. R. (contribution to the final report of the Tatar expedition for 1944). (Abstract.) Izv. Glav. upr. geol. fon. no. 2, 1947.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. HADCHENKO, O. A. : TARASENKOVA, YE. K.
2. USSR (600)
4. Buguruslan District - Bitumen
7. Chemical characteristics of the bitumens of the Buguruslan District. (Materials for the composite report of the Buguruslan expedition for 1944) [Abstract.] Izv. Glav. upr. geol. fon. no. 2. 1947.
9. Monthly List of Russian Accessions, Library of Congress, **March** 1953. Unclassified.

RADCHENKO, O. A. and USIENSKIY, V. A.

"The Origin of Various Types of Petroleum", Lengostoptekhhizdat, 1947.

RADCHENKO, O.A. and USPENSKIY, V. A.

"On the problem of the origin of different types of crude oils," (K voprosy genezisa tipov neftei), Leningrad State Publishing House, 1947.

RADCHENKO, G. A.

24007

RADCHENKO, G. A. Geokhimicheskiye materialy k voprosu o naftenosnosti  
Kizilovskogo rayona. Trudy Vsesoyuz. Nauch.-issled. Geol.-razved.  
TN-TN, Novaya seriya, TIF. 25, 1949, 3. 77-120. -- Bibliogr: 14 nazv.

LC: Litopis, No. 32, 1949.

CA

22

Connection between the character of asphaltene and the type of petroleum. O. A. Radchenko and O. P. Bolotskaya. *Doklady Akad. Nauk S.S.S.R.* 68, 731 (1940).—Fractional pptn. of asphaltene by petr. ether from C<sub>11</sub>, exts. allowed a classification of 15 typical petroleum samples into 2 groups: the 1st class is characterized by a nearly flat curve plotted with the percentage of asphaltene pptd. by 40 vols. of precipitant in terms of the ams. pptd. by 5, 10, 20, 30 vols. against the vol. of petr. ether used; the 2nd class gives a curve with a mild slope. A no. of samples give intermediate curves with a sharp initial rise followed by a flat portion. The 1st class is named "Chusovsk" type, after the most characteristic sample, and contains evidence of secondary oxidative transformations of the petroleum deposits; this process, by unknown mechanism, causes the pptn. of asphaltene by petr. ether.

G. M. Kosolapoff

Radchenko, O. A.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013

"Modern Concepts of the Origin of Petroleum and the Processes of Conversion and Breakdown", Sbornik "Pamyati akademika I. M. Gubkina" (Collection of Articles in Commemoration of the Academy Member I. M. Gubkin). USSR Academy of Sciences, 1951.

44-52-10-1000 0 A  
VEBER, V.V., professor; GORSKAYA, A.I.; YEGOROV, Ye.N.; MANUCHAROVA, Ye.A.;  
MESSINEVA, M.A.; RADCHENKO, O.A.; REMEZOVA, T.S.; ROMM, I.I.;  
SAVICH, V.G.; SKADOVSKIY, S.N.; UL'M, V.A.; FOKINA, N.I.; FORSH, T.B.;  
SHABAROVA, N.F.; SHCHAPOVA, T.F.; EBERZIN, A.G.; YURKEVICH, I.A.

Results of the comprehensive study of contemporary analogues of oil-  
bearing facies. Trudy VNIGNI no.2:111-121 '51. (MLRA 10:4)  
(Petroleum geology)

1. RADCHEVCO, G. A., TARASEKOVA, Ye. M.
2. USSR (600)
4. Bitumen - Buguruslan District
7. Chemical characteristics of the bitumens of the Buguruslan District (Materials for the composite report of the Buguruslan expedition for 1944). (Abstract.)  
Izv. Glav. upr. geol. fon. no. 2, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.



RADCHENKO, O. A.

PA 241T51

USSR/Geophysics - Bitumen

Nov/Dec 52

"Problem of the Scheme of Genetic Classification of  
Substances Called Bitumens," V.A. Uspenskiy and  
O. A. Radchenko

"Iz Ak Nauk SSSR, Ser Geol" No 6, pp 121-127

Outline individual meanings of the concept of "bit-  
umen" with certain revisions in existing terminol-  
ogy.

PA 241T51

VASSOYEVICH, N.B., prof., doktor geol.-miner.nauk; ANDREYEV, P.F., kand.  
khim.nauk; BELYAKOV, M.F., kand.geol.-miner.nauk; BARANOVA, T.E.,  
nauchnyy sotrudnik; BUSHINSKIY, G.I., prof.; GEEKER, R.F., prof.,  
doktor biolog.nauk; GROSSGEYM, V.A., kand.geol.-miner.nauk;  
ITENBERG, S.S., dotsent; KRISHTOFOVICH, A.N.; LYUBOMIROV, B.N.,  
kand.geol.-miner.nauk; PORFIR'YEV, G.S., kand.geol.-miner.nauk;  
POKROVSKAYA, I.M., prof., doktor geol.-miner.nauk; RADCHENKO, O.A.,  
kand.khim.nauk; RUKHIN, L.B., prof., doktor geol.-miner.nauk;  
TORGOVANOV, V.B., gidrogeolog; USPENSKIY, V.A., kand.khim.nauk;  
FROLOV, Ye.F., kand.geol.-miner.nauk; FURSENKO, A.V.; KHAIN, V.Ye.,  
prof., doktor geol.-miner.nauk; SHARONOV, V.V., prof., doktor  
fiziko-matem.nauk; YASHCHURZHINSKAYA, A.B., vedushchiy red.;  
SOKOLOVA, Ye.V., tekhn.red. (Continued on next card)

1952

VASSOYEVICH, H.B.---(continued) Card 2.

[Handbook for field geologists and petroleum prospectors]  
Sputnik polevogo geologa - neftianika. Leningrad, Gos.nauchno-  
tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, Leningr.otd-nie,  
1952. 50<sup>h</sup> p. (MIRA 12:12)

1. Groznenskiy ordena Trudovogo Krasnogo Znameni neftyanoy insti-  
tut (for Itenberg). 2. Deystvitel'nyy chlen AN Ukrainskoy SSR  
(for Krishtofovich). 3. Chlen-korrespondent AN Belorusskoy SSR  
(for Fursenko).

(Petroleum geology--Handbooks, manuals, etc.)

*RADCHENKO, O.A.*

AID P - 574

Subject : USSR/Mining  
Card 1/1 Pub. 78 - 11/22  
Author : Uspenskiy, V. A. and Radchenko, O. A.  
Title : Origin of petroleum (Discussion)  
Periodical : Neft. Khoz., v. 32, #8, 41-51, Ag 1954  
Abstract : Various hypothetical schemes of the chemical and biological origin and transformation of petroleum are described and analysed. Special consideration is given two types of caustobioliths considered as the result of natural parallel transformation of organic substances humification under the oxidation of burial conditions and bituminization under reduction conditions. Primary and secondary migration and accumulation of dispersed hydrocarbons at various stages of metamorphization were examined from the viewpoint of the problem of genesis and hypogenesis of petroleum and for the general outline of the natural history of petroleum. 14 Russian references (1932-1952).  
Institution : None  
Submitted : No date

BAKIROV, A.A., doktor nauk, redaktor; VASSOYEVICH, N.B., doktor nauk;  
VEBER, V.V., doktor nauk; DVALI, M.F., doktor nauk; DOBRYANSKIY,  
A.V., doktor nauk; MAYMIN, Z.L., doktor nauk; MIRCHINK, M.V.,  
redaktor; ANDREYEV, P.F., kandidat nauk; AYZENSHTADT, G.Ye.,  
kandidat nauk; BOGOMOLOVA, A.I., kandidat nauk; GORSKAYA, A.I.,  
kandidat nauk; ZHABREV, D.V., kandidat nauk, redaktor; KAZMINA,  
T.A., kandidat nauk; MESSINEVA, M.A., kandidat nauk, PETROVA,  
Yu.N., kandidat nauk; RADCHENKO, O.A., kandidat nauk; TATARSKIY,  
V.T., kandidat nauk; TIKHIY, V.N., kandidat nauk; USPENSKIY, V.A.,  
kandidat nauk, DYAKOV, B.F., redaktor; SAVINA, Z.A., redaktor;  
TROFIMOV, A.V., tekhnicheskij redaktor.

[Origin of oil] Proiskhozhdenie nefi. Pod red. M.F.Mirchinka i  
dr. Moskva, Gos.nauchno-tekhn.izd-vo nefianoi i gorno-toplivnoi  
lit-ry, 1955. 483 p. (MLRA 9:1)

1. Chlen korrespondent AN SSSR (for Mirchink)  
(Petroleum geology)

USPENSKIY, V.A.; RADCHENKO, O.A.

Genetic types of humic acids. Trudy VNIGRI no.83:188-195 '55.  
(Humic acid) (MLRA 8:10)

RADCHENKO, O. A.

7  
The geochemistry of the petroleum porphyrins. O. A. Radchenko and L. S. Sveshina. *Trudy Vsesoyuz. Nauch.-Issledovatel. Geologorazvedoch. Inst., Geol. Sbornik* 83, No. 1, 274-331(1955).—The porphyrins (I) were detd. in many petroleum and bitumen samples. I contain either V or Ni. In the petroleum fractions, the V-I are mostly found in the asphaltic resinous fractions and the Ni-I in the oily (truly liquid) fractions. The I actually are the residue of enzyme systems found in bacteria. 73 references.

Werner Jacobson

3

W

RADchenko, O. A.

✓ Origin of porphyrins in petroleum. O. A. Radchenko and  
S. Shcheglov. Doklady Akad. Nauk S.S.S.R. 105, 1957, 8  
(1958). Correction of abstr. in C.A.B. 50, 8181. The 3rd  
sentence of this abstr. should state that the contents of the Ni  
complex with porphyrin are approx. the same for high-S  
and low-S crude oils. The conclusion (incorrectly given in  
the abstr. referred to) is that the V complexes in petroleum  
are of secondary origin, as are the high S contents, and that  
the original oil was light, rich in low-boiling fractions and in  
paraffins, and low in asphaltic substances, S, and porphyrins.  
Enrichment in S and porphyrins is a secondary process  
attributed to the action of sulfate-reducing bacteria. E. H. gm mc



RADCHENKO, O.A.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4194

Author : Radchenko, O.A., Savinykh, A.G.

Inst : Academy of Sciences USSR

Title : Concerning Determination of the Type of Organic Matter of Rocks by Methods of Luminescence-Bitumenological Analysis

Orig Pub : Dokl. AN SSSR, 1956, 108, No 3, 503-506

Abstract : On the basis of investigation of capillary extracts of 8 varieties of humic coal, it is shown that the criteria proposed by A. Kartsev et al., (Dokl. AN SSSR, 1949, 65, No 2,) can be utilized within certain limits for evaluation of mineral fuels and of dispersed organic matter in rocks, namely as follows: in the case of humic substance of coal, up to the stage corresponding to coking coal varieties, in the case of bitumens to the stage of higher kerites, The method is not suitable in the case

Card 1/2

- 80 -

RADCHENKO, O. A.

USSR/ Cosmochemistry. Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11537

Author : Radchenko O.A., Sheshina L.S.

Inst : Academy of Sciences USSR

Title : On Primary Type of Petroleum During the Period of Formation of the Occurrence

Orig Pub : Dokl. AN SSSR, 1956, 109, No 3, 614-616

Abstract : A study has been made of porphyrines within the dispersed organic matter of sedimentary rocks, in which have been found porphyrine- metal complexes (V and Ni) analogous to petroleum and bitumens. It has been ascertained that vanadium porphyrines are associated with sulfurized bodies and that presence of nickel complexes does not depend on the sulfurization degree of the porphyrine carrier. A detailed study was made of a specimen of laminaritic clay from Pre-Cambrian deposits containing only nickel porphyrines. Content of porphyrines in chloroform extract fractions (in %): 1.33 in oils, 0.20 in benzene- and 0.38 in alcohol-benzene tar, 0.97 in asphaltenes. Absence of porphyrines in the asphalt-tar portions of petroleum and solid bitumens, while they are present in the fractions of

1/2

USSR/ Cosmochemistry. Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11537

bitumogens, indicates that in the process of petroleum accumulation took part only porphyrines of the oil portion. Asphalt-tar components of bitumogens were not removed from the petroleum-bearing rock during the formation of the petroleum deposit or did not reach the deposit, which is in favor of the notion concerning a relatively light primary type of the petroleum.

FEDOROV, A.N. [deceased]; UT'YANOV, A.V. [deceased]; TEODOROVICH, G.I.;  
USPENSKIY, V.A.; RADCHENKO, O.A.; FEDYNSKIY, V.V.; MAKSIMOV, M.I.;  
SUBBOTINA, N.N.; STEPANOV, D.L.; MIRCHINK, Mikhail Fedorovich,  
red.; IONINA, I.N., vedushchiy red.; YASHCHURZHINSKAYA, A.B.,  
tekhn. red.

[Dictionary of petroleum geology] Slovar' po geologii nefi. Izd.2.,  
ispr. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo nefi i gorno-  
toplivnoi lit-ry, Leningr. otd-nie, 1958. 776 p. (MIRA 11:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Mirchink).  
(Petroleum geology--Dictionaries)

SOV/2302

PHASE I BOOK EXPLOITATION

3(5)

Akademii nauk Ukrainakoy SSR. Institut geologii poleznykh iskopyemykh

Problema migratsii nefiti i formirovaniya neftyanykh i gazovykh skopleniy: materialy L'vovskoy diskussii 8-12 may 1957 g. (problem of oil migration and the formation of oil and gas accumulations: materials of the discussion held in L'viv, May 8-12, 1957) Moscow, Gostoptekhizdat, 1959. 422 p. 1,100 copies printed.

Eds.: V. B. Portir'yev, Academician of the Ukrainian SSR Academy of Sciences, and I. O. Brod, Professor, Institute of Geology and Mineral Resources, Academy of Sciences of the USSR, the Department of Geology and Oil Exploration, L'viv Polytechnic Institute, and the L'viv Geological Society. Theories on the origin of petroleum deposits and the conditions surrounding their occurrence are treated. There are 327 references: 232 Soviet, 86 English, 5 French, and 4 German.

PURPOSE: This collection of articles is intended for a wide range of geologists and research workers interested in oil problems.

COVERAGE: Articles contained in this book deal with the problems of migration and accumulation of oil and gas. These problems were

discussed in May 1957 at L'viv State University in. I. Franko at a meeting organized jointly by the Institute of Geology and Mineral Resources, Academy of Sciences of the USSR, the Department of Geology and Oil Exploration, L'viv Polytechnic Institute, and the L'viv Geological Society. Theories on the origin of petroleum deposits and the conditions surrounding their occurrence are treated. There are 327 references: 232 Soviet, 86 English, 5 French, and 4 German.

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REPORTS

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| Uspenskiy, P.P. [VNIIGRI, Leningrad] The Ways of Oil Transformation in Deposits                                                                             | 318 |
| Bogomolov, A.I. [VNIIGRI, Leningrad] The Problem of Oil Composition Changes Depending on the Age of the Enclosing Rocks                                     | 322 |
| Rudchenko, O.A. [Laboratoriya uglya] The Initial Stage of Oil Migration                                                                                     | 326 |
| Grinberg, I.V. [Institut geologii poleznykh iskopyemykh, L'viv] Problems in Genetic Relationship Between the Organic Kerogen and Natural Oil                | 329 |
| Dolitskiy, B.A. [Institut nefti, Moscow] Problems of Oil Deposit Formation in the Devonian of the Russian Platform                                          | 343 |
| Krotova, V.A. [VNIIGRI, Leningrad] Hydrogeological Factors in the Formation and Destruction of the Urals-Povolzh'ye Oil Deposits                            | 350 |
| Kasatkina, T.O. [TANIL Ukhinskogo neftekombinata] Conditions of Oil Occurrence in the Timano-Pechorskaya Province                                           | 354 |

14(5)

SOV/9-59-7-14/15

AUTHORS: Uspenskiy, V.A. and Radchenko, O.A.

TITLE: Letter to the Editor

PERIODICAL: Geologiya nefi i gaza, 1959, Nr 7, pp 63 - 64 (USSR)

ABSTRACT: The authors refer to a book on "Transformation of Petroleum in Nature" by P F. Andreyev, A.I. Bogomolov, A.F. Dobryanskiy, and A.A. Kartsev. They address some remarks to A.A. Kartsev who had incorrectly used data from a book composed by the authors on "Genesis of Petroleum Types" and analogous data submitted by G.P. Tamrazyan.

Card 1/1

RADCHENKO, O.A.

Present state of knowledge of the geochemistry of porphyrins  
and their role in the solution of certain problems in petroleum  
geochemistry. Azerb.khim.zhur. no.3:147-153 '60. (MIRA 14:8)  
(Porphyrins) (Petroleum--Analysis)  
(Geochemistry)

RADCHENKO, O.A. (Leningrad)

Regularities in the changes of extraction characteristics of coals  
during the metamorphism process. Izv.AN SSSR.Otd.tekh.nauk.Met.  
i topl. no.4:160-167 J1-Ag '60. (MIRA 13:9)  
(Coal--Testing) (Metamorphism (Geology))



KIM, N.G. (Leningrad); RADCHENKO, O.A. (Leningrad)

Characteristics of hydrocarbon components in coal. Izv. AN SSSR. Otd.  
tekh. nauk. Met. i topl. no. 4: 168-174 J1-Ag '60. (MIRA 13:9)  
(Coal--Analysis) (Hydrocarbons--Analysis)

RADCHENKO, O.A.

Geochemistry of petroleum porphyrins. Dokl. AN SSSR 134 no.3:684-687  
S '60. (MIRA 13:9)

1. Predstavleno akad. N.M. Strakhovym.  
(Petroleum geology) (Porphyrin and porphyrin compounds)

RADCHENKO, O.A.; KOPERINA, V.V.

Use of thermal analysis in studying dispersed organic matter in rocks.  
Dokl. AN SSSR 135 no.3:713-716 N '60. (MIRA 13:12)

1. Laboratoriya geologii uglya Akademii nauk SSSR. Predstavleno  
akad. N.M. Strakhovym.  
(Rocks—Thermal properties) (Organic matter)

RADCHENKO, O.A.

A new parameter for genetic classification of petroleum. Dokl. AN  
SSSR 138 no.6:1434-1437 Je '61. (MIRA 14:6)

1. Laboratoriya geologii uglya AN SSSR. Predstavleno akademikom  
N.M.Strakhovym.

(Petroleum geology)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; SHISHKOVA, A.P.;  
MEL'TSANSKAYA, T.N.; INDENBOM, F.B.; Prinimali uchastiye:  
KOLOTOVA, L.F., khimik; CHAGINA, T.P., tekhnik; BASKINA, T.B.,  
laborant; VIKULINA, M.N., laborant; POLOVNIKOVA, I.A., fizik;  
PETROV, A.K., tekhnik; PONOMAREV, B.P., laborant; KHYAMYALYAYNIN,  
L.B., laborant; KLOCHKOV, B.N., laborant; RAGINA, G.M., vedushchiy  
red.; SAFRONOVA, I.M., tekhn.red.

[Basic processes of the transformation of bitumens in nature  
and the problems of their classification] Osnovnye puti pre-  
obrazovaniia bitumov v prirode i voprosy ikh klassifikatsii.  
Leningrad, Gos.nauchno-tekhn.izd-vo nefi.i gorno-toplivnoi  
lit-ry Leningr.otd-nie, 1961. 314 p. (Leningrad. Vsesoiuznyi  
nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy,  
no.185). (MIRA 15:4)

(Bitumen--Geology)

VOLKOVA, I.B.; NALIVKIN, D.V.; SLATVINSKAYA, Ye.A.; BOGOMAZOV, V.M.;  
 GAVRILOVA, O.I.; GUREVICH, A.B.; MUDROV, A.M.; NIKOL'SKIY, V.M.;  
 OSHURKOVA, M.V.; PETRENKO, A.A.; POGREBITSKIY, Ye.O.; RITENBERG,  
 M.I.; BOCHKOVSKIY, F.A.; KIM, N.G.; LUSHCHIKHIN, G.M.; LYUBER,  
 A.A.; MAKEDONTSOV, A.V.; SENDERZON, E.M.; SINITSYN, V.M.; SHORIN,  
 V.P.; BELYANKIN, L.F.; VAL'TS, I.E.; VLASOV, V.M.; ISHINA, T.A.;  
 KONIVETS, V.I.; MARKOVICH, Ye.M.; MOKRINSKIY, V.V.; PROSVIRYAKOVA,  
 Z.P.; RADCHENKO, O.A.; SEMERIKOV, A.A.; PADDEYEVA, Z.I.; BUTOVA,  
 Ye.P.; VERBITSKAYA, Z.I.; DZENS-LITOVSKAYA, O.A.; DUBAR', G.P.;  
 IVANOV, N.V.; KARPOV, N.F.; KOLESNIKOV, Ch.M.; NEFED'YEV, L.P.;  
 POPOV, G.G.; SHTEMPEL', B.M.; KIRYUKOV, V.V.; LAVROV, V.V.;  
 SAL'NIKOV, B.A.; MONAKHOVA, L.P.[deceased]; MURATOV, M.V.;  
 GORSKIY, I.I., glav. red.; GUSEV, A.I., red.; MOLCHANOV, I.I.,  
 red.; TYZHN OV, A.V., red.; SHABAROV, N.V., red.; YAVORSKIY, V.I.,  
 red.; REYKHERT, L.A., red.izd-va; ZAMARAYEVA, R.A., tekhn. red

[Atlas of maps of coal deposits of the U.S.S.R.]Atlas kart ugle-  
 nakopleniia na territorii SSSR. Glav. red. I.I.Gorski. Zam.  
 glav. red. V.V.Mokrinski. Chleny red. kollegii: F.A.Bochkovski  
 i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 17 p.

(MIRA 16:3)

1. Akademiya nauk SSSR. Laboratoriya geologii uglia. 2. Chlen-  
 korrespondent Akademii nauk SSSR (for Muratov).

(Coal geology--Maps)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; GORSKAYA, A.I.;  
SHISHKOVA, A.P.; PARPAROVA, G.M.; KOLOTOVA, L.F.; MEL'TSANSKAYA,  
T.N.; NERUCHEV, S.G., red.

[Principles of the genetic classification of bitumens]. Osnovy  
geneticheskoi klassifikatsii bitumov. Leningrad, Nedra, 1964.  
266 p. (Leningrad, Vsesoiuznyi neftianoi nauchno-issledovatel'-  
skii geologorazvedochnyi institut. Trudy. no.230).

(MIRA 17:7)

RADCHENKO, Ol'ga Aleksandrovna; USPENSKIY, V.A., nauchn. red.;  
SHVETSOVA, E.M., ved. red.

[Geochemical characteristics of the distribution of oil-  
bearing provinces in the world] Geokhimicheskie zakono-  
mernosti razmeshcheniia neftenosnykh oblastei mira. Le-  
ningrad, Nedra, 1965. 313 p. (MIRA 18:5)



Leather Industry and Trade, S.I.

Leather Industry and Trade - Estimates and Costs

Planning the work of repair shops, Leg. prom. 12 No. 4, 1952

Monthly List of Russian Accessions, Library of Congress, July 1952.  
Unclassified.

RADCHENKO, O.G.; BROD, I.I.

AOZH unit for pressing and greasing skins. Kozh.-obuv.prom.  
no.2:22-24 F '59. (MIRA 12:6)  
(Leather--Machinery)

RADCHENKO, O.G.; PROKOF'YEV, S.L.

Continuous SHOF-1800-K machine for chrome leather polishing  
and dusting. Kozh.-obuv. prom. 7 no.12:9-12 D '65.  
(MIRA 19:2)

M

Country : USSR  
Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 22, 1958, No 100265

Author : Radchenko, O.N.; Shvartsman, E.M.

Inst : Odessa University

Title : The Influence of Pollen Mixture on the Yield  
of Corn Progeny.

Orig Pub: Nauchn. yezhegodnik. Odessk. un-t, 1956, Odessa,  
1957, 284-285.

Abstract: Results of the study of F<sub>1</sub> corn hybrids se-  
cured at Odessa University in 1956, by means  
of artificial pollination with a mixture of  
pollen. The greatest yield was produced by  
the combination: Grushevskaya odesskaya x

Card : 1/2

M

Country : USSR  
Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 22, 1958, No 100265

(Hybrid Odesskiy 1 VIR 42 Kremnistaya skorospelaya). The excess of the grain yield in hybrids over the primary forms comprised 15.0-21.5%.

Card : 2/2

M-44

GORSHKOVA, A.A.; RADCHENKO, O.P.

Wintering of some perennials in the Irkutsk-Balagansk forest  
steppes. Bot.zhur. 44 no.11:1660-1664 N '59.  
(MIRA 13:4)

1. Vostochno-Sibirskiy filial Akademii nauk SSSR, Irkutsk.  
(Irkutsk Province--Plants--Frost resistance)

SHANDANKO, L.P.

Criteria and the methods of paleogeographic reconstructions of  
previous conditions in violent land areas based on paleontological  
data. Moscow. paleogeog. 1981. no. 34/64-683 '81.

(MIRA 18:6)

RADCHENKO, P.; MITNITSKIY, R.

Equipment for reloading cement. Stroitel' no.3:14 Mr '57.  
(Loading and unloading) (Cement--Transportation): (MLRA 10:6)



D  
RADCHENKO, P.

Container for transporting gypsum boards. Stroitel' no.3:14 Mr  
'58. (MIRA 11:2)

1. Starshiy instruktor peredovykh metodov truda Byuro tekhnicheskoy  
pomoshchi Akademii stroitel'stva i arkhitektury USSR.  
(Wallboard--Transportation)

VOLKOVETS, N., slesar'-sborschchik (st. Berngardovka, Leningradskaya oblast'); PAVASAR, B., plotnik (st. Simskaya, Chelyabinskaya oblast'); ADIBEKYAN, O., inzh. (Yerevan); ROGOZIN, T. (Odessa); FRAUKIN, F., inzhener-mekhanik (Moskva); SEMENENKO, P., mekhanik; RADCHENKO, P., inzh.

Readers' letter exchange. Tekh.mol. 30 no.10:22-23 '62.

(MIRA 15:12)

1. Kolkhoz imeni Tel'mana, Turkmenskaya SSR (for Semenenko).  
(Technological innovations)

SHUPIK, P.; LAVRIK, S.; SHUMADA, I.; LESHCHENKO, P.; MEDYANIK, R.; RADCHENKO, P.;  
PAICHENKO, V.; YESINENKO, L.; CHEBOTAREV, D.; BRATUS', V.; ISHCHENKO, I.;  
KOMISSARENKO, I.; KOLCHMYCHENKO, I.; MAKARCHENKO, A.; ARUTYUNOV, A.;  
SKRIPNICHENKO, D.; RODZAYEVSKIY, A.; PAVLENKO, K.; LEONENKO, K.;  
KOZYRENKO, N.; PARKHOMENKO, V.; CHEREN'KO, M.

Aleksandr Kirillovich Gorchakov; obituary. Vrach. dolo no.8:144-145  
Ag '60. (MIRA 13:9)

(GORCHAKOV, ALEKSANDR KIRILLOVICH, 1900-1960)

RADCHENKO, P.G.

Container for transporting dry gypsum plaster and removal  
platform for receiving containers. Rats. 1 izobr. predl.  
v strei. no.117:7-10 '55. (MLRA 9:7)  
(Conveying machinery)

RADOCHENKO, F. G.

Medicine

Rural child care centers, Moskva, Institut sanitarnogo prosveshcheniya, 1953

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РАССЕЛЕНИЕ.

Selskie iasli (Rural child care centers) Moskva, Institut sanitarnogo prosvetsheniia, 1953. 115 p.

SO: Monthly List of Russian Accessions, Vol 6, No. 3, June 1953

RADCHENKO, P.G. [Radchenko, P.H.], zasluzhennyi vrach USSR (Kiyev)

Development of maternal and child welfare in the Ukrainian S.S.R.  
Ped., akush. i gin. 19 no.5:9-22 '57. (MIRA 13:1)  
(UKRAINE--MATERNAL AND CHILD WELFARE)

*Radchenko, P.G.*  
RADCHENKO, P.G.; SIMIRENKO, O.I.; TSIL'KER, E.Ye.

[Rural nurseries] Sel'skie yasli. Moskva, Institut sanitarnogo  
prosveshcheniya Ministerstva zdravookhraneniya SSSR, 1953. 105 p.  
(NURSERIES) (MIRA 11:3)



RADCHENKO, P.G. [Radchenko, P.H.] zasluzhemyy vrach USSR (Kiyev)

For a high quality of medical care in children's preschool  
institutions. Ped. akush. i gin. 22 no. 1:6-11 '60.  
(MIRA 13:8)

(UKRAINE--CHILDREN--CARE AND HYGIENE)

STARTSEV, Ivan Alekseyevich; NISHCHAYA, Sof'ya Yakovlevna; RADCHENKO,  
P.G., red.; NARINSKAYA, A.L., tekhn. red.

[Milk cookery and child nutrition] Molochnaia kukhnia i det-  
skoe pitanie. Izd.2., ispr. i dop. Kiev, Gosmedizdat  
USSR, 1962. 182 p. (MIRA 15:11)  
(CHILDREN--NUTRITION) (COOKERY (MILK))

RADCHENKO, R. M.

KRASILOVSKIY, L.S.; IL'CHENKO, A.I.; RADCHENKO, R.M.; SELISHCHEV, A.N.,  
redaktor: ALADOVA, Ye.I., tekhnicheskii redaktor.

[Electromagnetic separators] Elektromagnitnye separatory. Moskva,  
Ugletekhizdat. 1953. 70 p. (MLRA 7:7)  
(Separators(Machines)) ((Coal preparation))

137-58-4-8356

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 293 (USSR)

AUTHORS. Radchenko. R.P., Vishnyakova, M.P.

TITLE On the Causes of Increased Hardness in Slabs of 1Kh18N9T Steel (O prichinakh povyshennoy tverdosti slyabov iz stali 1Kh18N9T)

PERIODICAL Sb. tr. Kuznetskogo mezhobl. pravl. Nauchno-tekhn. o-va chernoy metallurgii, 1956, Vol 1. pp 66-71

ABSTRACT When 6-t slabs of stainless 1Kh18N9T steel are planed before rolling to sheet, hard surface defects resistant to machining appear similar to sintered fish scale or rough washed scale rolled-in during the rolling process. Investigations showed that the cause of these defects is the carburization of a surface layer of the ingot due to welding-on of mold iron. If the temperature of the metal before pouring is at the optimum 1590-1600°C and the molds are in good condition, rejects due to excessive slab hardness should not occur.

I. B.

Card 1/1 1. Steel--Machining--Hardness factors 2. Steel--Hardening--Analysis  
3. Steel--Surface properties

137-58-4-8357

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4. p 293 (USSR)

AUTHOR: Radchenko, R. P.

TITLE The Alpha Phase Content of Cast 1Kh18N9T and the Quality of the Sheet Surface (Soderzhaniye al'fa-fazy v litom metalle 1Kh18N9T i kachestvo poverkhnosti lista)

PERIODICAL Sb. tr. Kuznetskogo mezhobl. pravl. nauchno-tekhn. o-va chernoy metallurgii. 1956, Vol 1, pp 72-78

ABSTRACT At temperatures  $> 1250^{\circ}\text{C}$ , the amount of  $\alpha$  phase in 1Kh18N9T steel rises sharply, and at  $1270^{\circ}$  an increase in  $\gamma$ -phase grain size sets in. This gives rise to tears in slabs and hairline cracks in sheets. To eliminate rejects due to hairline cracks in sheets, the heating of ingots in soaking pits should be done at temperatures close to the minimum stated in the instructions ( $1250^{\circ}$ ).

1. Steel--Phase studies 2. Steel--Surface properties I. B.  
--Heat treatment factors

Card 1/1

Radehenko, R. P.

Effect of  $\alpha$ -phase on the quality of stainless steels. R. P. Radehenko (Met. Combine, Kuznetsk. Stal' 16, No. 5, 450-2 (1953)).—Surface cracks in 18 Cr-8 Ni-0.5 Ti steels are caused by the presence of  $\alpha$ -phase, and its distribution across a 690 X 690 mm. ingot was studied by heating sections of it at 890-1850°. The original ingot carried at its surface 8%  $\alpha$ -Fe which increased to 16% at 180-200 mm. from the surface and then dropped to 14.4% at the center of the ingot. When the core of the ingot was still liquid, it held the outside shell of the ingot at a high temp. leading to a higher  $\alpha$ -phase concn. When the core solidified, it remained for a considerable time at 1150° at which temp.  $\alpha$ -phase dissolves. On heating, the  $\alpha$ -phase increased to 16% at 1050-150°, dropped to 12.5% at 122°, and then steadily increased to 20% at 1850°.

L. D. Gar

metals

of

81539

SOV/137-59-5-11400

187100  
Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, pp 273-274  
(USSR)

AUTHOR: Radchenko, R.P.

TITLE: Selection of Heat Treatment Conditions for Large Size Parts  
With the Aid of Thermokinetic Graphs

PERIODICAL: V sb.: Materialy Nauchn.-tekhn. konferentsii po probl. zakalki  
v goryachikh sredakh i promezhutochn. prevrashcheniyu austenita.  
Vol 1, Yaroslavl; 1957, pp 133 - 149

ABSTRACT: The author analyzes a method of plotting thermokinetic graphs  
with the aid of a modernized Shevenar differential dilatometer  
with mechanical recording, used at the laboratory of the Kuz-  
netsk Combine. The author describes thermokinetic graphs of  
the austenite transformation in Cr-Ni-Mo steel and the effect  
of the steel smelting technology on the austenite transformation  
during the cooling process. The basic factors determining the  
amount of residual austenite are the type of the transformation  
occurring during quench hardening and the temperature of steel

Card 1/2

S1539

SOV/137-59-5-11400

Selection of Heat Treatment Conditions for Large Size Parts With the Aid of Thermokinetic Graphs

heating. The author enumerates the mechanical properties of structural components, obtained at different cooling rates of Cr-Ni-Mo steel. Investigations revealed that  $\sigma_p$ ,  $\sigma_b$  and the hardness of bright-pickling of granular structures were low. The properties of intermediate structures of granular formation were low after tempering at 600°C. To determine heat treatment conditions of a large-size part with the aid of thermokinetic graphs, it is necessary to know the location of the cooling curve on the graph for its central zone which determines the structure and properties of steel in the center of the part. The author describes methods of plotting these curves. An example is cited, where it is shown using Cr-Ni-Mo steel as an example that optimum heat treatment conditions of a part can be determined by the testing of samples which had been subjected to different variants of treatment, if there is a thermokinetic graph of austenite transformation, and if the properties of the structural components and the cooling curve of the center of the part are known. Cooling curves of the part which were experimentally found for any steel grade, can also be used for other steel grades of the same class. There are 20 bibliographical titles.

Card 2/2

A.B.



130-9-14/21

AUTHORS: Radchenko, R.P. and Koval'skaya, V.N.

TITLE: Tool for Punching Holes in Rail Chairs of New Section.  
(Instrument dlya proshivki pazov v novom profile rel'sovykh  
podkladok)

PERIODICAL: Metallurg, 1957, Nr 9, pp.28-30 (USSR)

ABSTRACT: In connection with the use of reinforced-concrete sleepers it has become necessary to punch holes of complicated shape in 2.6 mm thick rail chairs. Type Y10-steel punches had to be refaced after 80-100 holes and after refacing a further 300-600 holes could be punched. Of several substitute steels tested, type 5XHB (0.56% C, 0.64% Mn, 0.48% Si, 0.015% P, 0.005% S, 1.07% Cr, 0.90% W and 1.52% Ni) produced punches capable, after suitable heat treatment, of punching 800 to 1000 holes. Hard facing by arc welding is followed by three-fold tempering. Tests, whose results are tabulated in this article, showed that 700-1000 holes can be expected from the new type of punch before refacing, 15 000-37 410 after the first refacing and a total of 16 000 - 104 510. The introduction of the new punches has increased the production of

Card 1/2

130-9-14/21

Tool for Punching Holes in Rail Chairs of New Section.

chairs by 36% and saved 200 000 roubles per annum.  
There are 4 figures and 1 table.

ASSOCIATION: Kuznetsk Metallurgical Combine. (Kuznetskiy Metallurgicheskiy Kombinat)

AVAILABLE: Library of Congress. , .

Card 2/2

RADCHENKO, R.P., inzh.

Using thermokinetic diagrams for selecting conditions of heat  
treating large products. Izv.vys.ucheb.zav.; chern.met. no.10:  
135-142 0 '58. (MIRA 11:12)

1. Kuznetskiy metallurgicheskiy kombinat.  
(Steel--Heat treatment) (Thermodynamics)

RADCHENKO, R.P., inzh.

Effect of nonmetallic inclusions on the quality of large metal  
products. Izv. vys. ucheb. zav.; chern. met. no.12:89-92 D '58.  
(MIRA 12:3)

1.Kuznetskiy metallurgicheskiy kombinat.  
(Steel--Defects)